



STATE OF MONTANA

BULLETIN

OF THE

Department of Public Health

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No. 12

MONTANA STATE BOARD OF HEALTH.

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HELENA, MONTANA.

Published Monthly at Helena, by the State Board of Health.

"The science of disease prevention, if properly applied, can add fifteen years to the present average length of human life."—Prof. Irving Fisher, Yale.

This Bulletin will be mailed monthly to any person in Montana upon request mailed to the Secretary of the State Board of Health at Helena.

INDEPENDENT PUBLISHING CO.
HELENA, MONTANA



CHICKEN POX.

At a meeting of the State Board of Health held April the 1st, 1915, chicken pox was designated as a communicable disease. Having been so designated, it is now necessary for physicians to report promptly to the County or Local Health Officers any cases coming under their observation.

COMMUNICABLE DISEASE REPORTS.

Once more the physicians throughout the State are requested to promptly report their "Communicable" diseases to the Local and County Health Officers. The law requires it. The citizens are entitled to it. Common courtesy to the Health Department demands it.

REGULATION ON VEGETABLES.

At the same meeting of the Board of Health the following resolution was passed:

"Whereas, it has been shown on scientific investigation that vegetables grown on sewage irrigated farms may transmit typhoid fever:

Therefore, resolved that the sale of all vegetables grown on farms irrigated with human sewage, is absolutely prohibited in the State of Montana.

MEETING OF HEALTH OFFICERS' ASSOCIATION.

The meeting of the Montana Health Officers' Association, which will be held in Bozeman on July 12th and 13th, promises to be one of the most interesting and successful in the history of this Association. The President of the Agricultural College at Bozeman, has kindly written the Secretary, offering to co-operate in any way possible to advance the interests of this meeting. We hope to have a large attendance of Health Officers.

Arrangements should be made with the City and County authorities whereby the expenses of the Health Officers attending this meeting, be paid. This is only in accord with the custom that has been practiced by the most progressive cities and counties in the past.

The Montana Medical Association meets on the 14th and 15th of July at the same place. All physicians are invited to attend the meetings of the Health Officers' Association, and the Health Officers are urged to attend the meetings of the Medical Association.

MEETINGS FOR HEALTH OFFICERS.

The meeting of the National Association for the Study and Prevention of Tuberculosis, will be held in Seattle, on June 14th, 15th, and 16th.

Following this the meeting of the Seventh Pan-American Medical Congress will be held at the Palace Hotel, at San Francisco, June 17th to 21st inclusive. Delegates from the United States, Canada, Mexico and all the South American Republics will be present.

This Congress will meet in seven sections, namely: (1) Medicine; (2) Surgery; (3) Obstetrics and Gynecology; (4) Anatomy, Physiology, Pathology and Bacteriology; (5) Tropical Medicine and General Sanitation; (6) Laryngology, Rhinology and Otology; (7) Medical Literature.

Health Officers will find the section on General Sanitation extremely interesting and valuable.

Both these meetings can be conveniently attended by physicians and Health Officers who wish to make a trip to the Panama Exposition.

REGULATIONS FOR HOTELS.

At the meeting of the State Board of Health held April 1st, 1915, regulations governing the sanitary conditions of hotels were adopted. These regulations are being printed in pamphlet form and will be distributed to the hotels and Health Officers. We publish them herein in full.

RULES AND REGULATIONS OF THE STATE BOARD OF HEALTH UNDER CHAPTER 130, SESSION LAWS 1911, GOVERNING SANITARY CONDI- TIONS OF HOTELS.

Regulation 1—Suggestions to Guests.

These rules and regulations are designed to give you the maximum safety, comfort and health protection that a hotel or restaurant will reasonably permit. The management, however, must have your hearty assistance and co-operation to conduct this establishment in a satisfactory manner. You should use the property of the hotel or restaurant with the same care as if it were in your own homes. The use of washbowls in sleeping rooms for urinals; towels and bedding to shine your shoes; expectorating on floors, walls or carpets; or other equally filthy practices should be strongly con-

demned by all persons who desire to improve living conditions in our hotels or restaurants.

Regulation 2—Construction.

Every hotel and restaurant in this State shall be conducted in every department in a manner most conducive to the protection of the health, comfort and safety of its guests, and it shall be constructed, equipped and maintained with efficient plumbing, ventilation and lighting.

Regulation 3—Lavatories and Toilets.

(a) All hotels in cities, towns and villages where a system of waterworks and sewers, adjacent to the property, is maintained for public use, shall on or before January 1st, 1916, be equipped with suitable lavatories and toilet facilities for the accommodation of its guests. The sewer must be connected with the public sewer system.

(b) Each hotel shall be provided with a public wash-room, which must be supplied with clean individual towels or paper towels. The common or roller towel is absolutely prohibited.

Regulation 4—Outside Toilets.

(a) All hotels in cities, towns or villages not having a public sewer system or water works, shall have properly constructed privies, vaults or other sanitary devices, which shall always be kept clean, properly ventilated and well screened from insects and rodents.

(b) The wall or partition between the apartments must be tight. A separate apartment with separate entrance, properly designated and screened from public view, must be provided for each sex. All privy doors shall be self-closing.

(c) Where septic tanks are installed they must be constructed according to plans approved by the State Board of Health.

Regulation 5—Sleeping Accommodations.

(a) Every sleeping room shall be of sufficient size to afford at least 400 cubic feet of air space for each occupant over twelve years of age, and 200 cubic feet for each occupant under twelve years of age. No greater number of occupants than thus established shall be permitted to sleep in any one room.

Provided that this regulation shall not apply in cases of emergency, where the change is approved by the local health officer.

(b) Sleeping rooms must be kept in good repair. The ceiling, walls and floor shall be free from dirt.

(c) No room shall be used for a sleeping room in any hotel which does not have an adequate opening other than a transom over the door, to the outside of the building, or to well ventilated light wells, air shafts, courts or hallways. Light wells, air shafts and courts in such hotels must be open at the top, or provided with approved ventilators to furnish proper ventilation.

NOTE—In rooms having an outside window or a window opening on a well ventilated light well, air shaft or court, proper ventilation can be secured if the window is opened at top and bottom, and an adjustable shield is placed at the bottom to prevent drafts.

(d) At least one window in each sleeping room must be so constructed to permit it to be raised from the bottom or lowered from the top at any time. If storm windows are used, at least one for each sleeping room shall be either suspended from the top, or hinged from the sides, so that it can be opened and closed readily.

Regulation 6—Bedding.

(a) All hotels shall hereafter provide each bed, bunk, cot or other sleeping place for the use of transient guests with white cotton or linen pillow slips, top and under sheets, also mattress, and a reasonably sufficient quantity of bedding.

(b) The under sheet to be of sufficient size to completely cover the mattress and fold under on sides and ends.

(c) The top sheet must be at least of equal width, and on and after January 1st, 1916, it must be not less than 96 inches long, after being laundered.

(d) The long top sheet is to be folded back at the head of the bed so as to cover all top coverings, at least twelve inches.

(e) All bedding, including mattresses, quilts, blankets, pillows, sheets and comforts used in any hotel, must be thoroughly aired and kept clean. No bedding shall be used which

is worn out and unfit for further use. Pillow slips and sheets must be washed and ironed as often as they shall be assigned to a different guest.

NOTE—Bed quilts are difficult to wash and keep clean, and with the best of care they cannot be kept in proper condition. When they become worn they are especially objectionable. All bed covers should be made of washable material. Washable blankets and bed spreads should, whenever possible, be substituted for quilts. Such changes are earnestly recommended.

Regulation 7—Communicable Diseases.

Whenever a room in any hotel has been occupied by a guest ill with a communicable disease, it shall be thoroughly fumigated and disinfected in accordance with the rules of the State Board of Health, before being occupied by another guest.

Regulation 8—Premises.

All premises connected with, or used by, any hotel or restaurant, shall be kept in a sanitary condition, and it shall be the duty of the Local or County Health Officer, either upon his own initiative, or upon the complaint of any citizen, to take such action as may be necessary to abate any nuisance, source of filth, or cause of sickness, existing on the premises.

Regulation 9—General Provisions.

(a) The use of the common drinking cup is prohibited in all hotels, restaurants, lodging houses and other public places.

(b) It shall be unlawful for any person, firm or corporation to sweep, or permit sweeping in hotels, restaurants and other public places where the public is invited, unless the floor is first sprinkled with water, moist sawdust or other substance to prevent the raising of dust. When vacuum cleaners, or properly filled reservoir dustless brushes are used, the sprinkling or use of moist sawdust is not required.

(c) All floors and interior woodwork in hotels and restaurants shall be cleaned as often as may be necessary to keep them in a sanitary condition.

(d) All cuspidors, wherever used, must be cleaned daily and kept free from odor.

Regulation 10.

No room infested with bed bugs or vermin of any kind shall be rented to any guest for sleeping purposes.

Regulation 11—Inspections.

All hotels, restaurants, and lunch counters must be inspected each month by Local or County Health Officers, or his deputy, and when inspected must be scored according to the score card, which is a part of these regulations.

When the score of any hotel, restaurant or lunch counter falls below 70, but reaches 60 or more, the owner or lessee of such hotel, restaurant or lunch counter will be sent a warning notice, and if on subsequent inspection the score again falls below 70, or if at any time the score falls below 60, the license of said owner or lessee shall be revoked by the State Board of Health. Before the revocation of any license, the licensee shall have the privilege of appearing before the State Board of Health to show cause why his license should not be revoked.

Regulation 12—Posting Regulations.

These regulations must be posted in a conspicuous place in every hotel.

COMMUNICABLE DISEASES REPORTED TO THE STATE
BOARD OF HEALTH FOR THE MONTH OF
MARCH, 1915.

Smallpox—Great Falls, 6; Gallatin (Excl. of Bozeman), 2; Bozeman, 2; Granite, 1; Madison, 1; Meagher, 2; Missoula City, 5; Livingston, 5; Silver Bow (Excl. of Butte), 2; Butte, 6; Teton, 1; Wibaux, 1. Total, 34. Total last month, 89.

Diphtheria—Custer, 1; Anaconda, 2; Gallatin (Excl. of Bozeman), 1; Hill, 2; Rosebud, 1; Sheridan, 2; Silver Bow, (Excl. of Butte) 2; Butte, 2; Yellowstone (Excl. of Billings), 1. Total, 14. Total last month, 25.

Scarlet Fever—Beaverhead, 3; Dawson, 4; Fergus, 1; Hill, 1; Jefferson, 1; Lewis and Clark (Excl. of Helena), 16; Helena, 2; Madison, 7; Mineral, 4; Missoula County, 1; Prairie, 2; Stillwater, 4; Butte, 1; Total, 47. Total last month, 46.

Typhoid Fever. Blaine, 7; Chouteau, 2; Custer, 1; Dawson, 2; Gallatin (Excl. of Bozeman), 1; Hill, 1; Lincoln, 1; Livingston, 2; Helena, 3; Stillwater, 1; Teton, 1; Billings, 3. Total, 25. Total last month, 27.

Measles—Chouteau, 1; Fergus, 13; Bozeman, 1; Meagher, 1; Park (Excl. of Livingston), 1; Valley, 1; Yellowstone (Excl. of Billings), 27. Total, 45. Total last month, 10.

C. S. Meningitis.—None reported. Last month, 0.

Spotted (Tick) Fever—Missoula County, 1; Carbon, 1; Gallatin, 1. Total, 3. Total last month, 0.

Tuberculosis—Cascade (Excl. of Gt. Falls), 1; Custer, 1; Fergus, 1; Fallon, 1; Missoula City, 2; Livingston, 1; Butte, 7; Valley, 2; Total, 16. Total last month, 7.

Whooping Cough—Custer, 5; Dawson, 3; Hill, 2; Meagher 1; Stillwater, 1; Total, 12. Total last month, 21.

**BIRTHS (EXCL. OF *STILLBIRTHS) REPORTED TO THE STATE BOARD
OF HEALTH FOR THE MONTH OF MARCH, 1915, AND COM-
PARATIVE BIRTH AND DEATH RECORD IN THE STATE.**

	Males.....	Females.....	Totals.....	Deaths.....	Excess of Births.....	Excess of Deaths.....
Beaverhead	3	2	5	10	..	5
Broadwater	6	1	7	7
Carbon	10	9	19	12	7	..
Cascade (Excl. of)	20	15	35	10	25	..
Great Falls	26	30	56	28	28	..
Chouteau	10	11	21	10	11	..
Custer	10	13	23	7	16	..
Dawson	7	6	13	9	4	..
Deer Lodge (Excl. of)	4	1	5	15	..	10
Anaconda	9	17	26	13	13	..
Fergus	17	20	37	16	21	..
Flathead (Excl. of)	9	17	26	13	13	..
Kalispell	11	10	21	13	8	..
Gallatin (Excl. of)	17	13	30	10	20	..
Bozeman	7	6	13	11	2	..
Granite	3	2	5	3	2	..
Jefferson	1	..	1	1
Lewis and Clark (Excl. of)	3	7	10	12	..	2
Helena	18	13	31	18	13	..
Lincoln	5	4	9	4	5	..
Madison	3	1	4	9	..	5
Meagher	7	9	16	1	15	..
Missoula (Excl. of)	7	1	8	11	..	3
Missoula City	15	9	24	17	7	..
Musselshell	16	19	35	12	23	..
Park (Excl. of)	5	3	8	5	3	..
Livingston	11	4	15	6	9	..
Powell	4	1	5	2	3	..
Ravalli	8	17	25	14	11	..
Rosebud	2	2	4	6	..	2
Sanders	10	12	22	8	14	..
Silver Bow (Excl. of)	13	13	26	25	1	..
Butte	28	44	72	70	2	..
Sweet Grass	3	5	8	2	6	..
Teton	14	8	22	10	12	..
Valley	9	7	16	7	9	..
Yellowstone (Excl. of)	18	17	35	6	29	..
Billings	13	22	35	18	17	..
Blaine	10	15	25	5	20	..
Big Horn	4	3	7	1	6	..
Fallon	8	7	15	4	11	..
Hill	16	24	40	17	23	..
Mineral	3	4	7	1	6	..
Phillips	8	13	21	8	13	..
Prairie	2	1	3	6	..	3
Richland	7	11	18	4	14	..
Sheridan	8	17	25	8	17	..
Stillwater	6	7	13	6	7	..
Toole	3	2	5	1	4	..
Wibaux	2	1	3	1	2	..
Totals	459	496	955	513	472	30

*Stillbirths--39.

**DEATHS (EXCL. OF STILLBIRTHS) REPORTED TO THE STATE BOARD
OF HEALTH FOR THE MONTH OF MARCH, 1915, ARRANGED
ACCORDING TO COUNTIES AND PRINCIPAL CITIES.**

	Spotted Fever	Small Pox	Tuberculosis	Diphtheria	Scarlet Fever	Measles	Typhoid Fever	Meningitis	Whooping Cough	Pneumonia	Nephritis	Organic Heart Disease	Malignant Tumors	Acute Intestinal Diseases	Violence	Suicide	Alcoholism	All Other Causes	Totals
Beaverhead											3	2	1			2		5	10
Broadwater										1	1			1				3	7
Carbon										2	3			3				6	12
Cascade (Excl. of)										1	1			1				3	10
Great Falls										6	6		2	1				12	28
Chouteau				1				1		1	1	1		1				4	10
Custer			1	1						2	2	2						3	7
Dawson										2	2							3	9
Deer Lodge (Excl. of)			5												1			9	15
Anaconda			3							1	2					1		6	13
Fergus			1							1					3			10	16
Flathead (Excl. of)			1					1		1	1	2	1	1				7	13
Kallispell										2	2			3				6	13
Gallatin (Excl. of)										3	3							7	10
Bozeman										1	2	1	2					5	11
Granite										1		1						2	3
Jefferson			1																1
Lewis and Clark (Excl. of)			1				1			2	1	2						5	12
Helena			2							3	5	2						6	18
Lincoln			1													1		2	4
Madison			2				1				1			1	1			4	9
Meagher																			1
Missoula (Excl. of)			3							3		1	1	1				1	11
Missoula City			1							2	1	3	1	2				7	17
Musselshell			2							3	1	1	1	2				3	12
Park (Excl. of)															1			3	5
Livingston							1				2	1						2	6
Powell										1	1		1						2
Ravalli										2			3					9	14
Rosebud										1				2				3	6
Sanders			1							1	1	1		1	1			2	8
Silver Bow (Excl. of)			4							5	1	3		1				11	25
Butte			1	9				1		14	4	8	3	3	4	3		20	70
Sweet Grass								1							1				2
Teton				1						2	1	1						4	10
Valley			1				1							1		1		2	7
Yellowstone (Excl. of)			1							1	1			1				2	6
Billings										5		4		1	1			7	18
Blaine			2										1	1	1				5
Big Horn										1	1							3	4
Fallon										1	1			1	1				4
Hill					1					4	2	2	1	1	1			5	17
Mineral																			1
Phillips			2							2	1		1	1				1	8
Prairie										1	1							4	6
Richland										1	1				1			1	4
Sheridan			3							1	1					1		2	8
Stillwater										1	1		1					4	6
Toole			1																1
Wibaux																		1	1
Totals	1	1	149	2	1		4	4	5	80	37	44	21	8	35	12	5	205	513

Estimated population—420,000.

Monthly death rate per 1000 population—1.19.

Annual death rate per 1000 population—14.28.

DIVISION OF FOODS AND DRUGS.

Laboratory Report.

Summary of Samples Analyzed.

	Legal	Illegal	Unofficial	Total
Butter (Dairy Commission)		6		6
Butter	1			1
Bleaching Powder	1			1
Meat:				
Beef Steak			1	1
Pork Sausage	1			1
Hamburger	2	7	1	10
Weiner Wurst	7	1	1	9
Liver Sausage	1			1
Bologna Sausage	4	1		5
Ice				1
Water				47
Total.....	18	15	3	83

Forty-seven samples of water have been examined in the chemical and bacteriological laboratories. The samples were shipped from the following cities and towns: Alhambra Springs, Big Sandy, Bozeman, Chinook, Clyde Park, Corvallis, Crow Agency, Geraldine, Glacier Park, Harlowton, Havre, Helena, Kalispell, Livingston, Logan, Phillipsburg, Rexford, Toston, Twin Bridges, Whitefish, White Sulphur Springs, Wibaux and Worden.

The six samples from Bozeman were analyzed in connection with the special study of the pollution of the East Gallatin river. Forty-one samples of water were analyzed to determine their sanitary qualities. In the laboratory examination of twenty-two of these samples no evidences of the presence of dangerous contamination were found; fourteen of the samples were pronounced suspicious from the sanitary standpoint and recommendations made accordingly; four of the samples were found to be contaminated and could not be recommended for public consumption.

One sample of ice was examined in connection with the study of ice supplies for use on passenger trains in interstate traffic in accordance with the regulations of the Treasury Department.

Three of the butter samples examined were misbranded as to net contents of the packages and three were both misbranded and adulterated.

Twenty-seven samples of meat were examined as classified above in the tabulation. Nine of these were found to be illegal due to the presence of a chemical preservative. The preservatives found were sulphites and boric acid. One sample of beef steak was analyzed for informational purposes and two of the prepared meat samples arrived in the laboratory in a condition which made it impossible to analyze the same for official purposes.

WHAT ONE TYPHOID CARRIER DID.

There are a number of communities in Montana where typhoid fever is more prevalent than it should be. In some instances no systematic method of locating the exact sources of infection are carried out. In other cases the efforts of the local health department to find the sources of infection are seriously interfered with by opinions too freely expressed by the general public. These opinions are not as a rule based on facts that have been carefully verified and therefore confusion results which brings about a lack of confidence on the part of many people in the community. The lack of confidence leads to criticisms which do not help the local situation.

When a few cases of typhoid fever develop in a community it is the usual thing to say without full knowledge of the facts that the water supply is the source of infection. When the water supply is under suspicion it is often desirable to use the method of disinfection with hypochlorite. It should be appreciated by the public that this is a very acceptable method of water treatment when operated under proper conditions. Often however, through ignorance of the public, local representatives of water and health departments of a city have to contend with many unfair and untrue statements of prejudice made for no good purpose which confuse and destroy in large measure the benefits that might be derived by a concerted effort to improve the city water supply.

Granting that city water is often the source of typhoid infection, still those who are in the habit of always placing the blame on the water supply, should be more fully informed concerning numerous cases of typhoid fever where the infection is not transmitted by water but by food infected by a typhoid carrier. The importance of this source of infection is illustrated by numerous records in the literature of cases of typhoid fever traced to carriers. To illustrate this point the following quotation from the Ohio State Board of Health Bulletin is given:

"In the fall of 1910 Mr. A. moved from Minnesota to the town of G., Wisconsin, bringing with him his wife and three boys. He bought a farm 4 miles northeast of the village. Six months before moving to Wisconsin, Mr. A. had typhoid fever. About the time of moving to Wisconsin the eldest son had typhoid fever, and soon after the two other sons and their mother came down with the disease.

"Mr. B., with his family, consisting of his wife, two boys and a girl moved from Minnesota to Wisconsin about the same time, having purchased a farm in the immediate neighborhood of Mr. A. While the buildings on this place was being put in order Mr. B.'s family stayed at the home of Mr. A., with the apparent result that first the daughter and soon after Mr. B. and the two sons came down with typhoid fever.

"In the fall of 1911 Miss C., a niece of Mr. A., came from St. Paul to teach in the public schools. She was in the habit of spending the week-end at the house of Mr. A. After six weeks' residence in the town of G., she became ill with typhoid fever.

"At the same time a sister of Mr. A. visited him and soon after returning to her home suffered from typhoid fever also.

"About August 15, 1911, Mr. D. visited at the home of Mr. A. and took supper with him. September 20th Mr. D. entered a hospital after having been sick for some days, and a diagnosis of typhoid fever was made. His illness began during the first week of September.

"In the spring of 1912 two young men, E. and F. who were working at the home of Mr. A. both contracted typhoid fever.

"In the fall of the same year Mrs. G., a sister of Mrs. A., accompanied by her son, spent a few weeks at the home of Mr. A. Soon after returning home both contracted typhoid fever.

"In the latter part of 1912 or January, 1913, Mr. H. a brother of E. spent a night at the home of Mr. A. and twelve days afterward came down with typhoid fever.

"In June 1913, Miss I., a niece of Mr. A. living near him, suffered from typhoid fever. There had been frequent visiting between the two families.

"On or about October 15th, 1913, Mr. J. took the Reverend K., his wife and two children to the home of Mr. A. for a visit. They did not take a meal at the house, but the children became hungry and cookies were handed. October 28th, the Reverend K. bought butter from Mr. A. for table use, and on November 2, Mr. A. and family dined at the home of the Reverend K. On November 11, the two children of the Reverend K., became ill with typhoid fever, and on November 30th. Mrs. K. and her husband also went down with the disease. Mrs. K. dying.

"It thus appears that twenty-one cases of typhoid fever occurred among persons in this community, or those who had visited there, and all of them had been in contact for longer or shorter periods of time with Mr. A. Microscopic examination showed Mr. A. to be a 'typhoid carrier.'

"This report made by Dr. Mazyck P. Ravenel, Director of the Wisconsin State Laboratory of Hygiene, appears in a recent issue of The Journal of the American Medical Association. Every effort has been made to exclude other sources of infection. The water supply of the town of G. was examined and found to be above suspicion. There was no typhoid fever in this community except among those persons who had been in contact with Mr. A. Admitting that a few of these cases are doubtful, it is nevertheless reasonable to conclude that a great majority of them were infected directly or indirectly from Mr. A."

HELENA PUBLIC LIBRARY,

HELENA, MONT.